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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,181	09/22/2000	John Van Sadars	7174-128	1069
7590 03/26/2004				
Pennie & Edmonds LLP 1155 Avenue of the Americas New York, NY 10036-2711			EXAMINER NGUYEN, DANNY	
			ART UNIT 2836	PAPER NUMBER

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/668,181

**Applicant(s)**

VAN SADERS ET AL.

**Examiner**

Danny Nguyen

**Art Unit**

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1 and 7 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams, III (USPN 6,057,873) in view of Podell et al (USPN 5,301,081)

Regarding to claims 1, 3, 5, 7, Adams discloses a method and an apparatus for protecting over-voltage (see fig. 6) comprises normally off device (660) having a first output terminal coupled to a first signal branch of a balanced circuit (620), a second output terminal coupled to a second signal branch of the balanced circuit (620); wherein a balanced transient signal present on the first and second signal branch of the balanced circuit caused the device (660) to become conductive and to shunt the balanced signal (see col. 7, lines 5-24). Adams does not disclose a normally off device (660) is transistor. However, Adams states that the device (660) can be replaced by other shunt devices, which are well known in the art (see col. 7, lines 20-24). Podell discloses an over-voltage protection circuit (fig. 1) uses a normally off MESFET (24), which has a

control terminal (25) being coupled to a reference voltage (ground). Note that the current conducting electrodes (26 and 27) of the transistor (24) can be interchanged without influencing the MESFET performance. Thus, MESFET (24) is a bi-directional transistor, and a resistor (Rs) coupled between the control terminal (25) and the reference voltage (ground) to shunt surge voltage and apply bias voltage to the transistor (see col. 5, lines 12-13 and lines 45-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shunt device of Adams to use the shunt transistor as taught by Podell because Podell teaches that using MESFET transistor provides high speed switching (col. 5, lines 1-6).

Regarding to claim 4, Adams and Podell disclose all limitations of claim 1 except for having the transistor being various types (such as BJT or HBT). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select any known transistor as deemed suitable in order to provide voltage protection function. This is further demonstrated by applicant's various embodiments of the transistor as claimed absent persuasive evidence that particular type of transistor is significant.

3. Claims 2, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Podell, and further in view of Vasile. The combination of Adams and Podell disclose all limitations of claims 1 and 7 except for having a balun transformer. Vasile uses a balun transformer (28) to convert unbalanced transient signal to balanced transient signal. It would have been obvious to one of ordinary skill in the art at the time

the invention was made to have modified the transformer of the combination to use the balun transformer as taught by Vasile because the balun transformer provide greater bandwidth and lower losses.

***Allowable Subject Matter***

4. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DN  
3/12/2004

  
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